

Pending Claims

This listing of claims reflects the claims currently pending in the present application.

1. (Currently Amended) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a mass of bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a mass of carrier/active agent combination; and

a bio-compatible envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means for enclosing said mass of carrier/active agent combination within said hollow, said film enclosing means including at least one outwardly directed surface having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent.

2. (Currently amended) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a mass of bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a mass of carrier/active agent combination; and

a bio-compatible, biodegradable envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means for enclosing said mass of carrier/active agent combination within said hollow, said enclosing means including at least one outwardly directed side exterior walls including a pair of substantially planar, parallel, opposed walls.

3. (Currently amended) The bio-compatible product in accordance with claim 2, wherein said envelope bio-compatible, biodegradable enclosing means has a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent, said opposed walls being conjoined at respective peripheral edges thereof to form said envelope.

4. (Previously presented) The bio-compatible product in accordance with claim 1, wherein the carrier is an anionic carrier.

5. (Previously presented) The bio-compatible product in accordance with claim 1, wherein the active agent is a cationic agent.

6. (Previously presented) The bio-compatible product in accordance with claim 5, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents and hemostatic agents.

7. (Previously presented) The bio-compatible product in accordance with claim 4, wherein the anionic carrier is an oxidized regenerated cellulose carrier.

8. (Previously presented) The bio-compatible product in accordance with claim 7, wherein the anionic carrier is an oxidized regenerated cellulose fabric.

9. (Previously presented) The bio-compatible product in accordance with claim 8, wherein the active agent is a cationic agent.

10. (Previously presented) The bio-compatible product in accordance with claim 9, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants, antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs, growth factors and hemostatic agents.

11. (Currently amended) The bio-compatible product in accordance with claim 1, wherein said film ~~the enclosing means~~ is a non-biodegradeable polymer film.

12. (Currently amended) The bio-compatible product in accordance with claim 11, wherein said polymer is selected from the group consisting of polyethylene, polypropylene, mixtures thereof and copolymers of the constituent monomers thereof, said film ~~a microporous polymer~~ having a pore size of between 0.01 and 1000 microns.

13. (Currently amended) The bio-compatible product in accordance with claim 12, wherein said film ~~microporous polymer~~ has a pore size of between 0.1 and 500 microns.

14. (Currently amended) The bio-compatible product in accordance with claim 13, wherein said film ~~microporous polymer~~ has a pore size of between 0.1 and 50 microns.

15. (Currently amended) The bio-compatible product in accordance with claim 14, wherein said film ~~microporous polymer~~ has a pore size of between 0.1 and 5 microns.

16. (Currently amended) The bio-compatible product in accordance with claim 15, wherein said film ~~microporous polymer~~ has a pore size of between 0.1 and 1 microns.

17. (Currently amended) The bio-compatible product in accordance with claim 1, wherein the enclosing means is a polymer said film is selected from the group consisting of PLA, PLG, mixtures thereof and copolymers of the constituent monomers thereof.

18. (Previously presented) The bio-compatible product in accordance with claim 2, wherein the carrier is an anionic carrier.

19. (Previously presented) The bio-compatible product in accordance with claim 18, wherein the active agent is a cationic agent.

20. (Previously presented) The bio-compatible product in accordance with claim 19, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants,

antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs, growth factors and hemostatic agents.

21. (Previously presented) The bio-compatible product in accordance with claim 20, wherein the anionic carrier is an oxidized regenerated cellulose carrier.

22. (Previously presented) The bio-compatible product in accordance with claim 21, wherein the anionic carrier is an oxidized regenerated cellulose fabric.

23. (Previously presented) The bio-compatible product in accordance with claim 22, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents and hemostatic agents.

24. (Currently amended) The bio-compatible product in accordance with claim 2, wherein ~~the enclosing means~~ said film is a polymer selected from the group consisting of PLA, PLG, mixtures thereof and copolymers of the constituent monomers thereof.

25. (Currently amended) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a mass of bio-compatible, biodegradable anionic carrier which is an oxidized regenerated cellulose fabric;

a cationic pharmaceutically active agent which is ionically linked to said carrier, thereby forming a mass of carrier/active agent combination; said cationic pharmaceutically active agent being selected from the group consisting of cationic

analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants, antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs, growth factors and hemostatic agents and

a bio-compatible envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means for enclosing said carrier/active agent combination, said enclosing means film being made from a polymer selected from the group consisting of polyethylene, polypropylene, mixtures thereof and copolymers of the constituent monomers thereof, said ~~enclosing means including at least one outwardly directed surface film~~ having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent.

26. (Cancelled.)

27. (Currently amended) The bio-compatible product in accordance with claim 3, wherein the film enclosing means is a microporous polymer film.

28. (Previously presented) The bio-compatible product in accordance with claim 27, wherein the carrier is an anionic carrier.

29. (Previously presented) The bio-compatible product in accordance with claim 28, wherein the active agent is a cationic agent.

30. (Previously presented) The bio-compatible product in accordance with claim 29, wherein the active agent is selected from the group consisting of cationic

analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants, antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs and hemostatic agents.

31. (Previously presented) The bio-compatible product in accordance with claim 28, wherein the anionic carrier is an oxidized regenerated cellulose carrier.

32. (Previously presented) The bio-compatible product in accordance with claim 31, wherein the anionic carrier is an oxidized regenerated cellulose fabric.

33. (Previously presented) The bio-compatible product in accordance with claim 32, wherein the active agent is a cationic agent.

34. (Currently amended) The bio-compatible product in accordance with claim 27, wherein said film ~~microporous polymer~~ has a pore size of between 0.01 and 1000 microns.

35. (Currently amended) The bio-compatible product in accordance with claim 34, wherein said film ~~microporous polymer~~ has a pore size of between 0.1 and 500 microns.

36. (Currently amended) The bio-compatible product in accordance with claim 35, wherein said film ~~microporous polymer~~ has a pore size of between 0.1 and 50 microns.

37. (Currently amended) The bio-compatible product in accordance with claim 36, wherein said film ~~microporous-polymer~~ has a pore size of between 0.1 and 5 microns.

38. (Currently amended) The bio-compatible product in accordance with claim 37, wherein said film ~~microporous-polymer~~ has a pore size of between 0.1 and 1 microns.

39. (Currently amended) The bio-compatible product in accordance with claim 3, wherein said film ~~enclosing means~~ is made from a polymer selected from the group consisting of PLA, PLG, mixtures thereof and copolymers of the constituent monomers thereof.

40. (Currently amended) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a mass of bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a mass of carrier/active agent combination;

a bio-compatible envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means for enclosing said mass of carrier/active agent combination, said enclosing means including at least one an outwardly directed surface of at least

one of said exterior walls having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent; and

a ~~further~~ carrier layer disposed ~~located~~ on said ~~at least one~~ outwardly directed surface exterior to said hollow ~~of said enclosing means~~.

41. (Currently amended) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a mass of bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a mass of carrier/active agent combination;

a bio-compatible, biodegradable envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means ~~for enclosing said carrier/active agent combination within said hollow, said enclosing means including at least one outwardly directed side~~ exterior walls including a pair of substantially planar, parallel, opposed walls; and

a ~~further~~ carrier layer ~~located~~ disposed on said ~~at least one~~ an outwardly directed side of at least one of said walls exterior to said hollow ~~of said enclosing means~~.

42. (Currently amended) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a mass of bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a mass of carrier/active agent combination;

a bio-compatible, biodegradable envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing ~~means for~~ enclosing said carrier/active agent combination within said hollow, said exterior walls including a pair of substantially planar, parallel, opposed walls enclosing ~~means including at least one outwardly directed side and~~ having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent; and

a ~~further~~ carrier layer disposed located on said ~~at least one an~~ outwardly facing surface of each of said walls ~~said enclosing means~~.

43. (Currently amended) A method of administering a pharmaceutically active agent to the tissue surface of a subject in need of same, comprising the step of contacting said tissue surface with a bio-compatible delivery product having a bio-compatible, biodegradable anionic or cationic carrier, a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination, said carrier being disposed within a bio-compatible, non-biodegradable envelope with exterior walls formed from a microporous film, said

envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means for enclosing said carrier/active agent combination having at least one outwardly directed surface said film having a predetermined permeation gradient for the passage therethrough of said at least one pharmaceutically active agent, said administration of said pharmaceutically active agent being dependent on the permeability of said film enclosing means.

44. (Currently amended) A method of administering a pharmaceutically active agent to the tissue surface of a subject in need of same, comprising the step of contacting said tissue surface with a bio-compatible delivery product having a bio-compatible, biodegradable anionic or cationic carrier, a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination, said carrier being disposed within a bio-compatible, biodegradable envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls said envelope enclosing means for enclosing said carrier/active agent combination having at least one outwardly directed side, said administration of said pharmaceutically active agent being dependent on the rate of bio-degradability of the film enclosing means.

45. (Currently amended) A method of administering a pharmaceutically active agent to the tissue surface of a subject in need of same, comprising the step of contacting said tissue surface with a bio-compatible delivery product having a bio-

compatible, biodegradable anionic or cationic carrier, a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination, said carrier being disposed within a bio-compatible, biodegradable envelope with exterior walls formed from a microporous film, said envelope having an interior hollow delimited by said exterior walls, said envelope enclosing means for enclosing said carrier/active agent combination having at least one outwardly directed side, said film bio-compatible, biodegradable enclosing means having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent, said administration of said pharmaceutically active agent being dependent on the rates of bio-degradability and permeability of the film enclosing means.